# Pioneer

CD RECEIVER
RADIO CD
CD PLAYER
CD接收機
CD with a substitution of the control of th

# DEH-2150UBG DEH-2150UB

Owner's Manual Manual de instrucciones Manual do proprietário 用戶手冊 كتيب المالك



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# Thank you for purchasing this PIONEER product.

Please read through this manual before using the product for the first time, to ensure proper use. After reading, please keep the manual in a safe and accessible place for future reference.

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### **Before You Start**

#### **About this unit**



- Do not allow this unit to come into contact with liquids. Electrical shock could result.
   Also, damage to this unit, smoke, and overheating could result from contact with liquids.
- "CLASS 1 LASER PRODUCT"
   This product contains a laser diode of higher class than 1. To ensure continued safety, do not remove any covers or attempt to gain access to the inside of the product. Refer all servicing to qualified personnel.
- Keep this manual handy as a reference for operating procedures and precautions.
- Always keep the volume low enough so that you can hear sounds from outside the vehicle.
- Protect this unit from moisture.
- If the battery is disconnected or discharged, the preset memory will be erased and must be reprogrammed.
- Should this unit fail to operate properly, please contact your dealer or nearest authorized PIONEER Service Station.

# Portable audio player compatibility

Inquire at the manufacturer about your USB portable audio player/USB memory. This unit corresponds to the following.

- USB MSC (Mass Storage Class) compliant portable audio player and memory
- WMA, MP3 and WAV file playback



### **CAUTION**

Pioneer accepts no responsibility for data lost on the USB portable audio player/USB memory even if that data is lost while using this unit.

### Visit our website

Visit us at the following site:

#### http://pioneer.jp/group/index-e.html

• We offer the latest information about Pioneer Corporation on our website.

# Protecting your unit from theft

The front panel can be detached to deter theft.



#### **Important**

- Handle gently when removing or attaching the front panel.
- Avoid subjecting the front panel to excessive shock.
- Keep the front panel out of direct sunlight and high temperatures.
- Before detaching, be sure to remove the AUX/ USB cable and USB device from the front panel. Otherwise, this unit, connected device or vehicle interior may be damaged.

## Removing the front panel

- 1 Press **(detach)** to release the front panel.
- 2 Grab the front panel and remove.



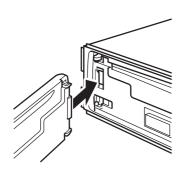
3 Put the front panel into the provided protective case for safe keeping.

### Attaching the front panel

1 Slide the front panel to the left until it clicks.

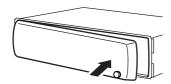
Front panel and the head unit are jointed on the left side. Make sure that the front panel has been jointed to the head unit.

#### **Before You Start**



# 2 Press the right side of the front panel until it is firmly seated.

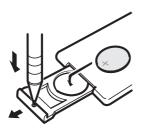
• If you can't attach the front panel to the head unit successfully, try again. Front panel may be damaged if you attach the front panel forcedly.



# Use and care of the remote control

### Installing the battery

Slide the tray on the back of the remote control out and insert the battery with the plus (+) and minus (-) poles aligned properly.





#### **WARNING**

Keep the battery out of the reach of children. Should the battery be swallowed, consult a doctor immediately.



#### CAUTION

- Use one CR2025 (3 V) lithium battery.
- Remove the battery if the remote control is not used for a month or longer.

- There is a danger of explosion if the battery is incorrectly replaced. Replace only with the same or equivalent type.
- Do not handle the battery with metallic tools.
- Do not store the battery with metallic objects.
- If the battery leaks, wipe the remote control completely clean and install a new battery.
- When disposing of used batteries, comply with governmental regulations or environmental public institutions' rules that apply in your country/area.

## Using the remote control

Point the remote control in the direction of the front panel to operate.

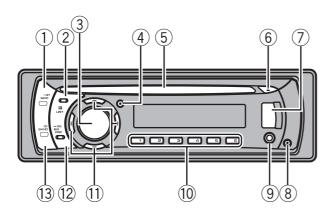
• The remote control may not function properly in direct sunlight.



#### **Important**

- Do not store the remote control in high temperatures or direct sunlight.
- Do not let the remote control fall onto the floor, where it may become jammed under the brake or accelerator pedal.

# What's what Head unit



#### 1 SRC/OFF button

This unit is turned on by selecting a source. Press to cycle through all the available sources.

#### ② **≣**I/LIST button

Press to display the disc title list, track title list, folder list or file list.

#### **3 MULTI-CONTROL**

Turn to increase or decrease the volume. Also used for controlling functions.

#### **4** CLOCK button

Press to change to the clock display.

### **5** Disc loading slot

Insert a disc to play.

#### ⑥ ▲ (eject) button

Press to eject a disc.

#### **OBB** port

Use to connect a USB audio player/USB memory.

- When connecting, open up the USB connector lid.
- Use a USB cable to connect the USB audio player/USB memory to the USB port. Since the USB audio player/USB memory is projected forward from the unit, it is dangerous to connect directly. Pioneer CD-U50E USB cable is also available. For details, consult your dealer.

#### (detach) button

Press to remove the front panel from the head unit.

# 9 AUX input jack (3.5 mm stereo jack)

Use to connect an auxiliary device.

#### 10 1 to 6 buttons

Press for preset tuning. Also used for controlling functions.

- 1/S.Rtrv can be used to control S.RTRV (sound retriever).
- **2/PAUSE** can be used to control **PAUSE** (pause).
- 5/XX can be used to control **RANDOM** (random).
- 6/
   can be used to control REPEAT (repeat).

#### (1) ▲/▼/◄/▶ buttons

Press to perform manual seek tuning, fast forward, reverse and track search controls. Also used for controlling functions.

- When operating menus
  - Pressing ▲ is the same function as turning MULTI-CONTROL right.
  - Pressing ▼ is the same function as turning MULTI-CONTROL left.
  - Pressing ◀ is the same function as pressing DISP/BACK/SCRL.
  - Pressing and holding 
     function as pressing and holding

     DISP/BACK/SCRL.
  - Pressing ► is the same function as pressing MULTI-CONTROL.
  - Pressing and holding ► is the same function as pressing and holding MULTI-CONTROL.
- When operating lists
  - Pressing ▲ is the same function as turning MULTI-CONTROL left.
  - Pressing ▼ is the same function as turning MULTI-CONTROL right.
  - Pressing ✓ is the same function as pressing DISP/BACK/SCRL.

# **Operating this unit**

- Pressing and holding 
   function as pressing and holding

   DISP/BACK/SCRL.
- Pressing ► is the same function as pressing MULTI-CONTROL.
- Pressing and holding ► is the same function as pressing and holding MULTI-CONTROL.

#### 12 DISP/BACK/SCRL button

Press to select different displays.

Press and hold to scroll through the text information.

Press to return to the previous display when operating the menu.

Press and hold to return to the main menu when operating the menu.

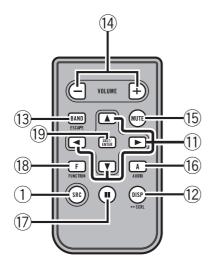
#### **13** BAND/ESC button

Press to select among three FM bands and one AM band.

Press to return to the ordinary display when operating the menu.

#### Remote control

Operation is the same as when using the buttons on the head unit.



#### (14) **VOLUME** buttons

Press to increase or decrease the volume.

#### 15 MUTE button

Press to turn off the sound. To turn on the sound, press again.

#### **16** AUDIO button

Press to select an audio function.

#### 17 II button

Press to turn pause on or off.

#### **18 FUNCTION button**

Press to select functions.

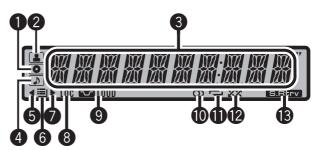
Press and hold to recall the initial setting menu when the sources are off.

#### **19 LIST/ENTER button**

Press to display the disc title list, track title list, folder list or file list depending on the source.

While in the operating menu, press to control functions.

### **Display indication**



#### **1** (disc) indicator

Appears when the disc (album) name is displayed on the main display section.

#### 2 (artist) indicator

Appears when the disc (track) artist name is displayed on the main display section.

#### Main display section

Displays band, frequency, elapsed playback time and other settings.

- Tuner
  - Band and frequency are displayed.
- Built-in CD player and USB
   Elapsed playback time and literal information are displayed.

#### 4 (song) indicator

Appears when the track (song) name is displayed on the main display section.

Also, appears when a playable audio file is selected while operating the list.

#### **6 ◄** indicator

Appears when an upper tier of folder or menu exists.

#### **⑥ ■** (folder) indicator

Appears when operating list function.

#### 

Appears when a lower tier of folder or menu exists.

#### 8 LOC indicator

Appears when local seek tuning is on.

#### LOUD (loudness) indicator

Appears when loudness is on.

#### (stereo) indicator

Appears when the selected frequency is being broadcast in stereo.

#### 

Shows when track repeat is turned on. Also, shows when folder repeat is on.

#### ② ★★ (random) indicator

Shows when random play is on.

#### **③** S.Rtrv (Sound Retriever) indicator

Appears when Sound Retriever function is on. ■

# **Basic Operations**

#### **Power ON/OFF**

#### Turning the unit on

Press SRC/OFF to turn the unit on.

#### **Turning the unit off**

 Press SRC/OFF and hold until the unit turns off.

#### Selecting a source

You can select a source you want to listen to.

 Press SRC/OFF repeatedly to switch between the following sources.

**TUNER** (tuner)—**CD** (built-in CD player)—**USB** (USB)—**AUX** (AUX)

# **Notes**

- In the following cases, the sound source will not change.
  - When there is no disc in the unit.
  - When AUX (auxiliary input) is set to off (refer to page 16).
- When the USB portable audio player/USB memory is not connected to the USB port of this unit, NO DEVICE is displayed.
- AUX is set to on by default. Turn off the AUX when not in use (refer to Switching the auxiliary setting on page 16).
- Charging the portable audio player using car's DC power source while connecting it to AUX input may generate noise. In this case, stop charging.
- When this unit's blue/white lead is connected to the vehicle's auto-antenna relay control terminal, the vehicle's antenna extends when this unit's source is turned on. To retract the antenna, turn the source off.

## **Adjusting the volume**

■ Turn MULTI-CONTROL to adjust the sound level. ■

#### **Tuner**

### **Basic Operations**

Select a band

Press BAND/ESC.

Press BAND/ESC until the desired band (F1,
 F2, F3 for FM or AM) is displayed.

Manual tuning (step by step)

Press **◄** or **►**.

# **Operating this unit**

#### Seek tuning

Press and hold ◀ or ▶, and then release.

- You can cancel seek tuning by briefly pressing
- **⋖** or **▶**.
- While pressing and holding ◀ or ▶, you can skip stations. Seek tuning starts as soon as you release ◀ or ▶.

# **Storing and recalling broadcast frequencies**

You can easily store up to six broadcast frequencies for later recall.

- Six stations for each band can be stored in memory.
- When you find a frequency that you want to store in memory, press one of preset tuning buttons 1 to 6 and hold until the preset number stops flashing.

Memorized radio station frequency can be recalled by pressing the preset tuning button.

 You can also recall radio station frequencies assigned to preset tuning numbers by pressing ▲ or ▼ during the frequency display.

# Introduction to advanced operations

- 1 Press MULTI-CONTROL to display the main menu.
- 2 Use MULTI-CONTROL to select FUNCTION.

Turn to change the menu option. Press to select.

# 3 Turn MULTI-CONTROL to select the function.

**BSM** (best stations memory)—**LOCAL** (local seek tuning)



- To return to the previous display, press DISP/BACK/SCRL.
- To return to the main menu, press and hold DISP/BACK/SCRL.

- To return to the ordinary display, press **BAND/ESC**.
- If you do not operate functions within about 30 seconds, the display automatically returns to the ordinary display.

# Storing the strongest broadcast frequencies

BSM (best stations memory) automatically stores the six strongest broadcast frequencies in the order of their signal strength.

- 1 Use MULTI-CONTROL to select BSM in the function menu.
- 2 Press MULTI-CONTROL to turn BSM on.
- To cancel, press **MULTI-CONTROL** again.

### **Tuning in strong signals**

Local seek tuning lets you tune in only those radio stations with sufficiently strong signals for good reception.

- 1 Use MULTI-CONTROL to select LOCAL in the function menu.
- 2 Press MULTI-CONTROL to display the setting mode.
- 3 Turn MULTI-CONTROL to select the desired setting.

FM: OFF—LEVEL 1—LEVEL 2—LEVEL 3—LEVEL 4

AM: OFF—LEVEL 1—LEVEL 2

The **LEVEL 4** setting allows reception of only the strongest stations, while lower settings let you receive progressively weaker stations.

- 4 Press MULTI-CONTROL to determine the selection.
- Even if the menu has been cancelled before determination, operation is settled. ■

# **Built-in CD Player Basic Operations**

• Insert a CD (CD-ROM) into the disc loading slot.

Playback will automatically start.

- When loading a disc, face the label side of a disc up.
- Eject a CD (CD-ROM)

Select a folder

Press ▲ or ▼.

Select a track

Press **◄** or **►**.

#### Fast forward or reverse

Press and hold ◀ or ▶.

- When playing compressed audio, there is no sound on fast forward or reverse.
- Return to root folder

Press and hold **BAND/ESC**.

# Switch between compressed audio and CD-DA

Press BAND/ESC.

- This operation is available only when playing CD-EXTRA or MIXED-MODE CDs.
- If you have switched between compressed audio and CD-DA, playback starts at the first track on the disc.

# **Motes**

- The built-in CD player can play back audio CD and compressed audio recorded on a CD-ROM. (Please see the following section for files that can be played back. Refer to page 24)
- Read the precautions for discs and player on page 23.
- A disc has already been inserted, press
   SRC/OFF to select the built-in CD player.

- There is sometimes a delay between starting up disc playback and the sound being issued.
   When being read, FRMT READ is displayed.
- If an error message is displayed, refer to *Error* messages on page 22.
- Playback is carried out in order of file number.
   Folders are skipped if they contain no files. (If folder 01 (ROOT) contains no files, playback commences with folder 02.)

# Displaying text information on disc

Press DISP/BACK/SCRL to select the desired text information.

#### For CD TEXT discs

Play time—**DISC TITLE** (disc title)— **ARTISTNAME** (disc artist name)— **TRACKTITLE** (track title)—**ARTISTNAME** (track artist name)

#### For WMA/MP3

Play time—**FLD NAME** (folder name)— **FILE NAME** (file name)—**TRACKTITLE** (track title)—**ARTISTNAME** (artist name)— **ALBUMTITLE** (album title)—**COMMENT** (comment)—bit rate—folder and track numbers

#### For WAV

Play time—**FLD NAME** (folder name)— **FILE NAME** (file name)—sampling frequency—folder and track numbers

# **Motes**

- You can scroll to the left of the title by pressing and holding DISP/BACK/SCRL.
- Audio CD that contains certain information such as text and/or number is CD TEXT.
- If the characters recorded on the audio file are not compatible with this unit, those characters will not be displayed.
- If specific information is not recorded on a disc, NO XXXX will be displayed (e.g., NO TITLE).
- The text information of some audio files may not be correctly displayed.

## **Operating this unit**

- Depending on the version of iTunes used to write MP3 files onto a disc, comment information may not be correctly displayed.
- Depending on the version of Windows
   Media<sup>™</sup> Player used to encode WMA files,
   album names and other text information may
   not be correctly displayed.
- When playing back VBR (variable bit rate)-recorded WMA files, the average bit rate value is displayed.
- When playing back VBR (variable bit rate)-recorded MP3 files, VBR is displayed instead of bit rate value.
- The sampling frequency shown in the display may be abbreviated.

# Selecting tracks from the track title list

Track title list lets you see the list of track titles on a CD TEXT disc and select one of them to play back.

# 1 Press **≡**/LIST to switch to the track title list mode.

# 2 Use MULTI-CONTROL to select the desired track title.

Turn to change the track title. Press to play.

- To return to the ordinary display, press **BAND/ESC** or **■**/**LIST**.
- If you do not operate the list within about 30 seconds, the display automatically returns to the ordinary display.

# Selecting files from the file name list

File name list lets you see the list of file names (or folder names) and select one of them to playback.

# 1 Press **≡**/LIST to switch to the file name list mode.

Names of files and folders appear in the display.

# 2 Use MULTI-CONTROL to select the desired file name (or folder name).

Turn to change the name of file or folder.

- when a file is selected, press to play.
- when a folder is selected, press to see a list of files (or folders) in the seleted folder.
- when a folder is selected, press and hold to play a song in the selected folder.
- To return to the previous list (the folder one level higher), press **DISP/BACK/SCRL**.
- To return to the top tier of list, press and hold **DISP/BACK/SCRL**.
- To return to the ordinary display, press **BAND/ESC** or **■**I/LIST.
- If you do not operate the list within about 30 seconds, the display automatically returns to the ordinary display.

# Introduction to advanced operations

# 1 Press MULTI-CONTROL to display the main menu.

# 2 Use MULTI-CONTROL to select FUNCTION.

Turn to change the menu option. Press to select.

# 3 Turn MULTI-CONTROL to select the function.

**REPEAT** (repeat play)—**RANDOM** (random play)—**SCAN** (scan play)—**PAUSE** (pause)—**S.RTRV** (sound retriever)

# **Notes**

- To return to the previous display, press DISP/BACK/SCRL.
- To return to the main menu, press and hold DISP/BACK/SCRL.
- To return to the ordinary display, press BAND/ESC.
- If you do not operate functions within about 30 seconds, the display automatically returns to the ordinary display.

### Selecting a repeat play range

- Press 6/
   ¬ repeatedly to select the desired setting.
  - **DISC** Repeat all tracks
  - TRACK Repeat the current track
  - FOLDER Repeat the current folder
- If you select another folder during repeat play, the repeat play range changes to disc repeat.
- Performing track search or fast forward/reverse during **TRACK** (track repeat) changes the repeat play range to disc/folder.
- When FOLDER (folder repeat) is selected, it is not possible to play back a subfolder of that folder.
- You can also perform this operation in the menu that appears by using **MULTI-CONTROL**.

### Playing tracks in random order

Tracks in a selected repeat range are played in random order.

● Press 5/₺ to turn random play on.

Tracks play in a random order.

- To turn random play off, press 5/★★ again.
- You can also perform this operation in the menu that appears by using MULTI-CONTROL.

### **Scanning folders and tracks**

Scan play searches the song within the selected repeat range.

- 1 Use MULTI-CONTROL to select SCAN in the function menu.
- 2 Press MULTI-CONTROL to turn scan play on.

The first 10 seconds of each track is played.

- 3 When you find the desired track press MULTI-CONTROL to turn scan play off.
- If the display has automatically returned to the playback display, select **SCAN** again by using **MULTI-CONTROL**.
- After scanning of a disc (folder) is finished, normal playback of the tracks begins.

#### Pausing playback

Press 2/PAUSE to turn pause on.

Playback of the current track pauses.

- To turn pause off, press **2/PAUSE** again.
- You can also perform this operation in the menu that appears by using MULTI-CONTROL.

### **Using Sound Retriever**

Sound Retriever function automatically enhances compressed audio and restores rich sound.

 Press 1/S.Rtrv repeatedly to select the desired setting.

**OFF** (off)—1—2

- **2** is more effective than **1**.
- You can also perform this operation in the menu that appears by using

MULTI-CONTROL.

# Playing songs on USB portable audio player/USB memory

For details about the supported device, refer to Portable audio player compatibility on page 4.

## **Basic Operations**

Select a folder

Press **▲** or **▼**.

Select a track

Press ◀ or ▶.

Fast forward or reverse

Press and hold ◀ or ▶.

Return to root folder
 Press and hold BAND/ESC.



 Optimum performance of this unit may not be obtained depending on the connected USB portable audio player/USB memory.

## **Operating this unit**

- If folder 01 (ROOT) contains no files, playback commences with folder 02.
- When the USB portable audio player having battery charging function is connected to this unit and the ignition switch is set to ACC or ON, the battery is charged.
- You can disconnect the USB portable audio player/USB memory anytime you want to finish listening to it.
- If you do not use an USB device, disconnect it from this unit.
- When the USB portable audio player/USB memory is disconnected from this unit during playback, NO DEVICE is displayed.

# Displaying text information of an audio file

The operation is the same as that of the compressed audio on the built-in CD player. (Refer to *Displaying text information on disc* on page 10.)

# Selecting files from the file name list

The operation is the same as that of the builtin CD player. (Refer to *Selecting files from the file name list* on page 11.)

# Introduction to advanced operations

1 Press MULTI-CONTROL to display the main menu.

# 2 Use MULTI-CONTROL to select FUNCTION.

Turn to change the menu option. Press to select.

# 3 Turn MULTI-CONTROL to select the function.

**REPEAT** (repeat play)—**RANDOM** (random play)—**SCAN** (scan play)—**PAUSE** (pause)—**S.RTRV** (sound retriever)

#### **Function and operation**

**REPEAT**, **RANDOM**, **SCAN**, **PAUSE** and **S.RTRV** operations are basically the same as that of the built-in CD player.

Function name	Operation
REPEAT	Refer to Selecting a repeat play range on the previous page. However, the repeat play ranges you can select are different from that of the built-in CD player. The repeat play ranges of the USB portable audio player/USB memory are:  • TRACK – Repeat just the current file • FOLDER – Repeat the current folder • ALL – Repeat all files
RANDOM	Refer to <i>Playing tracks in random</i> order on the previous page.
SCAN	Refer to Scanning folders and tracks on the previous page.
PAUSE	Refer to <i>Pausing playback</i> on the previous page.
S.RTRV	Refer to <i>Using Sound Retriever</i> on the previous page.



- To return to the previous display, press DISP/BACK/SCRL.
- To return to the main menu, press and hold DISP/BACK/SCRL.
- To return to the ordinary display, press **BAND/ESC**.
- If you do not operate functions within about 30 seconds, the display automatically returns to the ordinary display.
- If you select another folder during repeat play, the repeat play range changes to **ALL**.
- If you perform track search or fast forward/reverse during TRACK, the repeat play range changes to FOLDER.
- After file or folder scanning is finished, normal playback of the files begins again.

# Audio Adjustments Introduction of audio adjustments

- 1 Press MULTI-CONTROL to display the main menu.
- **2** Use MULTI-CONTROL to select AUDIO. Turn to change the menu option. Press to select

# 3 Turn MULTI-CONTROL to select the audio function.

**FAD/BAL** (balance adjustment)—**EQUALIZER** (equalizer recall)—**TONE CTRL** (equalizer adjustment)—**LOUDNESS** (loudness)—**SLA** (source level adjustment)



- To return to the previous display, press DISP/BACK/SCRL.
- To return to the main menu, press and hold DISP/BACK/SCRL.
- To return to the ordinary display, press BAND/ESC.
- When selecting FM as the source, you cannot switch to SLA.
- If you do not operate functions within about 30 seconds, the display automatically returns to the ordinary display.

### **Using balance adjustment**

You can change the fader/balance setting so that it can provide the ideal listening environment in all occupied seats.

- 1 Use MULTI-CONTROL to select FAD/BAL in the audio function menu.
- 2 Press MULTI-CONTROL to display the setting mode.
- 3 Press MULTI-CONTROL to select the segment you wish to set.

Press **MULTI-CONTROL** repeatedly to switch between fader and balance.

# 4 Turn MULTI-CONTROL to adjust speaker balance.

Front/rear speaker balance can be adjusted between **F15** and **R15**.

Left/right speaker balance can be adjusted between **L15** and **R15**.

■ **FR 0** is the proper setting when only two speakers are used.

#### Using the equalizer

There are six stored equalizer settings such as **DYNAMIC**, **VOCAL**, **NATURAL**, **CUSTOM**, **FLAT** and **POWERFUL** that can easily be recalled at any time.

- **CUSTOM** is an adjusted equalizer curve that you create.
- When FLAT is selected no supplement or correction is made to the sound.

#### **Recalling equalizer curves**

- 1 Use MULTI-CONTROL to select EQUALIZER in the audio function menu.
- 2 Press MULTI-CONTROL to display the setting mode.
- 3 Turn MULTI-CONTROL to select the equalizer.

DYNAMIC—VOCAL—NATURAL—CUSTOM
—FLAT—POWERFUL

- 4 Press MULTI-CONTROL to determine the selection.
- Even if the menu has been cancelled before determination, operation is settled.

### **Adjusting equalizer curves**

You can adjust the currently selected equalizer curve setting as desired. Adjusted equalizer curve settings are memorized in **CUSTOM**.

#### Adjusting bass/mid/treble

You can adjust the bass/mid/treble level.

# **Operating this unit**

- 1 Use MULTI-CONTROL to select TONE CTRL in the audio function menu.
- 2 Press MULTI-CONTROL to display the setting mode.
- 3 Press MULTI-CONTROL to select BASS/MID/TREBLE.
- 4 Turn MULTI-CONTROL to adjust the level.
- **+6** to **-6** is displayed as the level is increased or decreased.
- 5 Press MULTI-CONTROL to determine the selection.
- Even if the menu has been cancelled before determination, operation is settled.

### **Adjusting loudness**

Loudness compensates for deficiencies in the low- and high-sound ranges at low volume.

- 1 Use MULTI-CONTROL to select LOUDNESS in the audio function menu.
- 2 Press MULTI-CONTROL to display the setting mode.
- 3 Turn MULTI-CONTROL to select the desired setting.

**LOW** (low)—**HIGH** (high)—**OFF** (off)

- 4 Press MULTI-CONTROL to determine the selection.
- Even if the menu has been cancelled before determination, operation is settled.

### **Adjusting source levels**

Source level adjustment (**SLA**) lets you adjust the volume level of each source to prevent radical changes in volume when switching between sources.

- Settings are based on the FM volume level, which remains unchanged.
- The AM volume level can also be adjusted with source level adjustments.

- 1 Compare the FM volume level with the level of the source you wish to adjust.
- 2 Use MULTI-CONTROL to select SLA in the audio function menu.
- 3 Press MULTI-CONTROL to display the setting mode.
- 4 Turn MULTI-CONTROL to adjust the source volume.
- **+4** to **-4** is displayed as the source volume is increased or decreased.
- 5 Press MULTI-CONTROL to determine the selection.
- Even if the menu has been cancelled before determination, operation is settled. ■

# Initial Settings Adjusting initial settings

- 1 Press SRC/OFF and hold until the unit turns off.
- 2 Press MULTI-CONTROL and hold until CLOCK SET appears in the display.
- 3 Turn MULTI-CONTROL to select one of the initial settings.

**CLOCK SET** (clock)—**FM STEP** (FM tuning step)—**AM STEP** (AM tuning step)—**AUX** (auxiliary input)

- To return to the previous display, press **DISP/BACK/SCRL**.
- To return to the main menu, press and hold **DISP/BACK/SCRL**.
- To cancel initial settings, press **BAND/ESC**.

### **Setting the clock**

Use these instructions to set the clock.

1 Use MULTI-CONTROL to select CLOCK SET in the initial setting menu.

Refer to Adjusting initial settings on this page.

# 2 Press MULTI-CONTROL to display the setting mode.

■ To return to the previous display, press **DISP/BACK/SCRL**.

# 3 Press MULTI-CONTROL to select the segment of the clock display you wish to set.

Each time you press **MULTI-CONTROL**, one segment of the clock display is selected. Hour—Minute

As you select segments of the clock display, the selected segment blinks.

# 4 Turn MULTI-CONTROL to put a clock right.

### **Setting the FM tuning step**

The FM tuning step employed by seek tuning can be switched between 100 kHz, the preset step, and 50 kHz.

- If seek tuning is performed in 50 kHz steps, stations may be tuned in imprecisely. Tune in the stations with manual tuning or use seek tuning again.
- The tuning step remains at 50 kHz during manual tuning.

# 1 Use MULTI-CONTROL to select FM STEP in the initial setting menu.

Refer to *Adjusting initial settings* on the previous page.

- 2 Press MULTI-CONTROL to display the setting mode.
- 3 Turn MULTI-CONTROL to select the FM tuning step.

**50 KHZ** (50 kHz)—**100 KHZ** (100 kHz)

# 4 Press MULTI-CONTROL to determine the selection.

• Even if the menu has been cancelled before determination, operation is settled.

### Setting the AM tuning step

The AM tuning step can be switched between 9 kHz, the preset step, and 10 kHz. When using the tuner in North, Central or South America, reset the tuning step from 9 kHz (531 kHz to 1602 kHz allowable) to 10 kHz (530 kHz to 1640 kHz allowable).

# 1 Use MULTI-CONTROL to select AM STEP in the initial setting menu.

Refer to Adjusting initial settings on the previous page.

- 2 Press MULTI-CONTROL to display the setting mode.
- 3 Turn MULTI-CONTROL to select the AM tuning step.

**10 KHZ** (10 kHz)—**9 KHZ** (9 kHz)

- 4 Press MULTI-CONTROL to determine the selection.
- Even if the menu has been cancelled before determination, operation is settled.

### Switching the auxiliary setting

It is possible to use auxiliary device with this unit. Activate the auxiliary setting when using auxiliary device connected to this unit.

# 1 Use MULTI-CONTROL to select AUX in the initial setting menu.

Refer to Adjusting initial settings on the previous page.

- 2 Press MULTI-CONTROL to turn AUX on.
- To turn AUX off, press **MULTI-CONTROL** again. ■

# Other Functions Using the AUX source

You can connect an auxiliary device to this unit using a stereo mini plug cable.

• Insert the stereo mini plug into the input jack on this unit.

#### **Selecting AUX as the source**

- Press SRC/OFF to select AUX as the source.
- If the auxiliary setting is not turned on, **AUX** cannot be selected. For more details, see *Switching the auxiliary setting* on the previous page.

### Turning the clock display on or off

You can turn the clock display on or off.

- Even when the sources are off, the clock display appears on the display.
- Press CLOCK to turn the clock display on or off.

Each press of **CLOCK** turns the clock display on or off.

■ The clock display disappears temporarily when you perform other operations, but the clock display appears again after 25 seconds. ■

### **Connections**

# [ Important

 When this unit is installed in a vehicle without ACC (accessory) position on the ignition switch, red cable must be wired to the terminal that can detect the operation of the ignition key. Otherwise, battery drain may result.





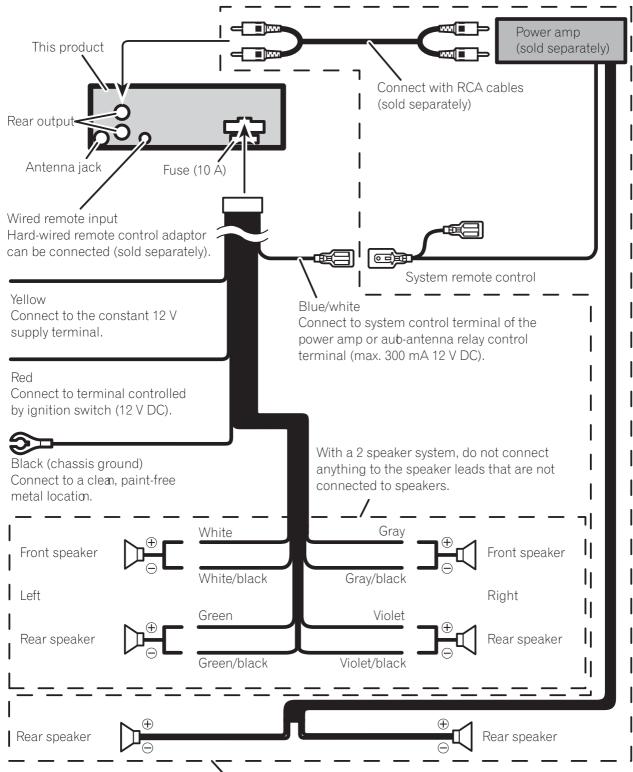
ACC position

No ACC position

- Use of this unit in conditions other than the following could result in fire or malfunction.
  - Vehicles with a 12-volt battery and negative grounding.
  - Speakers with 50 W (output value) and 4 ohm to 8 ohm (impedance value).
- To prevent a short-circuit, overheating or malfunction, be sure to follow the directions below.
  - Disconnect the negative terminal of the battery before installation.
  - Secure the wiring with cable clamps or adhesive tape. To protect the wiring, wrap adhesive tape around them where they lie against metal parts.
  - Place all cables away from moving parts, such as gear shift and seat rails.
  - Place all cables away from hot places, such as near the heater outlet.
  - Do not pass the yellow cable through a hole into the engine compartment to connect to a battery.
  - Cover any disconnected cable connectors with insulating tape.
  - Do not shorten any cables.
  - Never cut the insulation of the power cable of this unit in order to share the power with other devices. Current capacity of the cable is limited.
  - Use a fuse of the rating prescribed.
  - Never wire the speaker negative cable directly to ground.
  - Never band together multiple speaker's negative cables.

- Control signal is output through blue/white cable when this unit is powered on. Connect it to an external power amp's system remote control or the vehicle's auto-antenna relay control terminal (max. 300 mA 12 V DC). If the vehicle is equipped with a glass antenna, connect it to the antenna booster power supply terminal.
- Never connect blue/white cable to external power amp's power terminal. Also, never connect it to the power terminal of the auto antenna. Otherwise, battery drain or malfunction may result.
- Black cable is ground. This cable and other product's ground cable (especially, high-current products such as power amp) must be wired separately. Otherwise, fire or malfunction may result if they are accidentally detached.

# **Connection diagram**

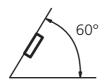


Perform these connections when using the optional amplifie.

### **Installation**

# [ Important

- Check all connections and systems before final installation.
- Do not use unauthorized parts. Use of unauthorized parts may cause malfunctions.
- Consult your dealer if installation requires drilling of holes or other modifications to the vehicle.
- Do not install this unit where:
  - it may interfere with operation of the vehicle.
  - it may cause injury to a passenger as a result of a sudden stop.
- The semiconductor laser will be damaged if it overheats. Install this unit away from hot places such as near the heater outlet.
- Optimum performance is obtained when the unit is installed at an angle of less than 60°.



When installing, to ensure proper heat dispersal when using this unit, make sure you leave ample space behind the rear panel and wrap any loose cables so they are not blocking the vents.

### **DIN front/rear mount**

This unit can be properly installed either from "Front" (conventional DIN front-mount) or "Rear" (DIN rear-mount installation, utilizing threaded screw holes at the sides of unit chassis). For details, refer to the following installation methods.

#### **DIN Front-mount**

#### Installation with the rubber bush

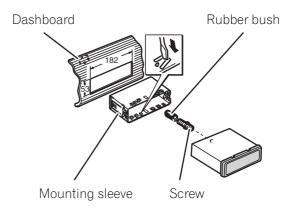
1 Insert the mounting sleeve into the dashboard.

When installing in a shallow space, use a supplied mounting sleeve. If there is enough

space behind the unit, use factory supplied mounting sleeve.

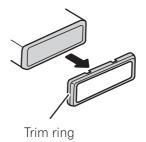
# 2 Secure the mounting sleeve by using a screwdriver to bend the metal tabs (90°) into place.

#### 3 Install the unit.

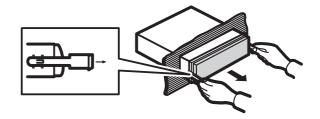


#### Removing the unit

1 Extend top and bottom of the trim ring outwards to remove the trim ring. (When reattaching the trim ring, point the side with a groove downwards and attach it.)



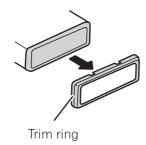
- It becomes easy to remove the trim ring if the front panel is released.
- 2 Insert the supplied extraction keys into both sides of the unit until they click into place.
- 3 Pull the unit out of the dashboard.



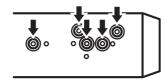
# **Installation**

#### **DIN Rear-mount**

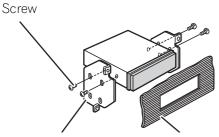
1 Extend top and bottom of the trim ring outwards to remove the trim ring. (When reattaching the trim ring, point the side with a groove downwards and attach it.)



- It becomes easy to remove the trim ring if the front panel is released.
- 2 Determine the appropriate position where the holes on the bracket and the side of the unit match.



3 Tighten two screws on each side.



Mounting bracket

Dashboard or console

 Use either truss screws (5 mm × 8 mm) or flush surface screws (5 mm × 9 mm), depending on the shape of screw holes in the bracket.

# **Error messages**

When you contact your dealer or your nearest Pioneer Service Center, be sure to have the error message recorded.

### **Built-in CD Player**

Message	Cause	Action
ERROR-11, 12,	Dirty disc	Clean disc.
17, 30	Scratched disc	Replace disc.
ERROR-10, 11, 12, 15, 17, 30, A0	Electrical or mechanical	Turn the ignition switch OFF and back ON, or switch to a different source, then back to the CD player.
ERROR-15	The inserted disc does not contain any data	Replace disc.
ERROR-22, 23	The CD format cannot be played back	Replace disc.
NO AUDIO	The inserted disc does not contain any files that can be played back	Replace disc.
SKIPPED	The inserted disc contains WMA files that are protected by DRM	Replace disc.
PROTECT	All the files on the inserted disc are secured by DRM	Replace disc.

#### **USB** audio player/**USB** memory

Message	Cause	Action
NO AUDIO	No songs	Transfer the audio files to the USB portable audio player/USB memory and connect.
	USB memory with security en- abled is con- nected	Follow the USB memory instructions to disable the security.

SKIPPED	The connected USB portable audio player/ USB memory contains WMA files that are protected by Windows Media™ DRM 9/ 10	Play an audio file not protected by Windows Media DRM 9/10.
PROTECT	All the files on the connected USB portable audio player/ USB memory are protected by Windows Media DRM 9/10	Transfer audio files not protected by Windows Media DRM 9/10 to the USB portable audio player/USB memory and connect.
N/A USB	The USB device connected to is not supported by this unit.	Connect a USB portable audio player or USB memory that is USB Mass Storage Class compliant.
CHECK USB	The USB connector or USB cable is short-circuited.	Confirm that the USB connector or USB cable is not caught in something or damaged.
	The connected USB portable audio player/ USB memory consumes more than 500 mA (maximum allowable current).	Disconnect the USB portable audio player/USB memory and do not use it. Turn the ignition switch to OFF, then to ACC or ON and then connect the compliant USB portable audio player/USB memory.

ERROR-19	Communication failure	Perform one of the following operations.  -Turn the ignition switch OFF and back ON.  -Disconnect the USB portable audio player/USB memory.  -Change to a different source. Then, return to the USB portable audio player/USB memory.
ERROR-23	USB device is not formatted with FAT16 or FAT32	USB device should be formatted with FAT16 or FAT32.



 Use only discs featuring either of following two logos.





Use only conventional, fully circular discs.
 Do not use shaped discs.





- Use 12-cm or 8-cm CD. Do not use an adapter when playing 8-cm CDs.
- Do not insert anything other than a CD into the CD loading slot.
- Do not use cracked, chipped, warped, or otherwise damaged discs as they may damage the player.

- Unfinalized CD-R/CD-RW disc playback is not possible.
- Do not touch the recorded surface of the discs.
- Store discs in their cases when not in use.
- Avoid leaving discs in excessively hot environments including under direct sunlight.
- Do not attach labels, write on or apply chemicals to the surface of the discs.
- To clean a CD, wipe the disc with a soft cloth outward from the center.
- Condensation may temporarily impair the player's performance. Leave it to adjust to the warmer temperature for about one hour. Also, wipe any dump discs with a soft cloth.
- Playback of discs may not be possible because of disc characteristics, disc format, recorded application, playback environment, storage conditions, and so on.
- Text information may not be correctly displayed depending on the recorded environment.
- Road shocks may interrupt disc playback.
- Read the precautions for discs before using them.

### **Dual Discs**

- Dual Discs are two-sided discs that have a recordable CD for audio on one side and a recordable DVD for video on the other.
- Since the CD side of Dual Discs is not physically compatible with the general CD standard, it may not be possible to play the CD side with this unit.
- Frequent loading and ejecting of a Dual
  Disc may result in scratches on the disc.
  Serious scratches can lead to playback problems on this unit. In some cases, a Dual
  Disc may become stuck in the disc loading
  slot and will not eject. To prevent this, we
  recommend you refrain from using Dual
  Disc with this unit.

 Please refer to the information from the disc manufacturer for more detailed information about Dual Discs.

# Compressed audio compatibility

#### **WMA**

- Compatible format: WMA encoded by Windows Media Player
- File extension: .wma
- Bit rate: 48 kbps to 320 kbps (CBR), 48 kbps to 384 kbps (VBR)
- Sampling frequency: 32 kHz, 44.1 kHz, 48 kHz
- Windows Media Audio 9 Professional, Lossless, Voice: No

#### **MP3**

- File extension: .mp3
- Bit rate: 8 kbps to 320 kbps (CBR), VBR
- Sampling frequency: 16 kHz to 48 kHz (32, 44.1, 48 kHz for emphasis)
- Compatible ID3 tag version: 1.0, 1.1, 2.2, 2.3, 2.4 (ID3 tag Version 2.x is given priority than Version 1.x.)
- M3u playlist: No
- MP3i (MP3 interactive), mp3 PRO: No

#### WAV

- Compatible format: Linear PCM (LPCM), MS ADPCM
- File extension: .wav
- Quantization bits: 8 and 16 (LPCM), 4 (MS ADPCM)
- Sampling frequency: 16 kHz to 48 kHz (LPCM), 22.05 kHz to 44.1 kHz (MS AD-PCM)

# Handling guideline and supplemental information

 There may be a slight delay when starting playback of audio files encoded with image data.

- Only 32 characters from beginning can be displayed as a file name (including the file extension) or a folder name.
- The text information of some audio files may not be correctly displayed.
- This unit may not operate correctly depending on the application used to encode WMA files.

### Compressed audio files on the disc

- ISO 9660 Level 1 and 2 compliant. Romeo and Joliet file systems are both compatible with this player.
- Multi-session playback is possible.
- Compressed audio files are not compatible with packet write data transfer.
- Regardless of the length of blank section between the songs of original recording, compressed audio discs play with a short pause between songs.

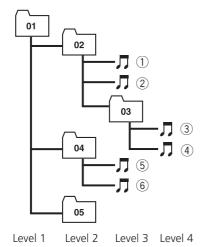
### **USB audio player/USB memory**

- This unit can play back files in the USB portable audio player/USB memory that is
  USB Mass Storage Class. However, copyright protected files that are stored in
  above-mentioned USB devices cannot be played back.
- You cannot connect a USB portable audio player/USB memory to this unit via a USB hub.
- Partitioned USB memory is not compatible with this unit.
- Depending on the kind of USB portable audio player/USB memory you use, this unit may not recognize the USB audio player/USB memory or audio files may not be played back properly.
- Do not leave the USB portable audio player/USB memory in direct sunlight for extended amounts of time. Extended exposure to direct sunlight can result in USB portable audio player/USB memory malfunction due to the resulting high temperature.

- Do not leave the USB portable audio player/USB memory in high temperature.
- Firmly secure the USB portable audio player/USB memory when driving. Do not let the USB portable audio player/USB memory fall onto the floor, where it may become jammed under the brake or accelerator pedal.
- Depending on the USB devices connected to this unit, it may generate noise in the radio.
- There may be a slight delay when starting playback of audio files on a USB portable audio player/USB memory with numerous folder hierarchies.
- Do not connect anything other than the USB portable audio player/USB memory.
- Operations may vary depending on the kind of USB audio player and a USB memory.

## **Example of a hierarchy**

☐: Folder ☐: Compressed audio file



# The sequence of audio files on the disc

• This unit assigns folder numbers. The user cannot assign folder numbers.

- Folder selection sequence or other operation may be altered depending on the encoding or writing software.
- Folder hierarchy is allowed up to eight tiers. However, a practical hierarchy of folder is less than two tiers.
- Up to 99 folders on a disc can be played back.

# The sequence of audio files on USB memory

For USB portable audio players, the sequence is different from that of USB memory and depends on the player.

- 01 to 05 represent assigned folder numbers. ① to ⑥ represent the playback sequence. The user cannot assign folder numbers and specify the playback sequence with this unit.
- Playback sequence of the audio file is the same as recorded sequence in the USB device.
- To specify the playback sequence, the following method is recommended.
  - 1 Create the file name including numbers that specify the playback sequence (e.g., 001xxx.mp3 and 099yyy.mp3).
  - 2 Put those files into a folder.
  - 3 Record the folder containing files into the USB device.

However, depending on the system environment, you cannot specify the file playback sequence.

- Up to 15 000 files on a USB portable audio player/USB memory can be played back.
- Up to 500 folders on a USB portable audio player/USB memory can be played back.
- Up to eight tiers directory on a USB portable audio player/USB memory can be played back.

# Copyright and trademark notice

#### **WMA**



Windows Media and the Windows logo are trademarks or registered trademarks of Microsoft Corporation in the United States and/or other countries.

#### **MP3**

Supply of this product only conveys a license for private, non-commercial use and does not convey a license nor imply any right to use this product in any commercial (i.e. revenue-generating) real time broadcasting (terrestrial, satellite, cable and/or any other media), broadcasting/streaming via internet, intranets and/or other networks or in other electronic content distribution systems, such as pay-audio or audio-on-demand applications. An independent license for such use is required. For details, please visit http://www.mp3licensing.com.

#### iTunes

iTunes is a trademark of Apple Inc., registered in the U.S. and other countries.

# **Specifications**

#### General

Rated power source 14.4 V DC (allowable voltage range: 12.0 V to 14.4 V DC)
Grounding system Negative type
Max. current consumption
10.0 A
Dimensions (W $\times$ H $\times$ D):
Chassis 178 mm $\times$ 50 mm $\times$ 165 mm
Nose 188 mm $\times$ 58 mm $\times$ 15 mm D
Chassis178 mm $\times$ 50 mm $\times$ 165 mm
Nose 170 mm $\times$ 48 mm $\times$ 15 mm
Veight1.3 kg

#### **Audio**

Continuous power output	. 22 W × 4 (50 Hz to 15 000
	Hz, 5% THD, 4 $\Omega$ load, both
	channels driven)
Load impedance	. 4 $\Omega$ (4 $\Omega$ to 8 $\Omega$ allowable)
Preout max output level	. 2.0 V
Tone controls:	
Bass	
Frequency	. 100 Hz
Gain	. ±13dB
Mid	
Frequency	.1 kHz
Gain	. ±12 dB
Treble	
Frequency	. 10 kHz
Frequency	. ±13dB .1 kHz . ±12 dB

Gain ..... ±12 dB

Maximum power output ...... 50 W × 4

#### **CD** player

System	Compact disc audio system
Usable discs	Compact disc
Signal-to-noise ratio	94 dB (1 kHz) (IEC-A net-
	work)
Number of channels	2 (stereo)
MP3 decoding format	MPEG-1 & 2 Audio Layer 3
WMA decoding format	Ver. 7, 7.1, 8, 9, 10, 11 (2ch
	audio)
	(Windows Media Player)
WAV signal format	Linear PCM & MS ADPCM
	(Non-compressed)

#### **USB**

Specification	USB 2.0 full speed
Supply current	500 mA

Maximum amount of memo	ory
	250 GB
Minimum amount of memo	ry
	256 MB
USB Class	MSC (Mass Storage Class)
File system	FAT16, FAT32
MP3 decoding format	MPEG-1 & 2 Audio Layer 3
WMA decoding format	Ver. 7, 7.1, 8, 9, 10, 11 (2ch
	audio)
	(Windows Media Player)
WAV signal format	Linear PCM & MS ADPCM
	(Non-compressed)

#### **FM** tuner

Frequency range	87.5 MHz to 108.0 MHz
Usable sensitivity	11 dBf (0.7 $\mu$ V/75 $\Omega$ , mono,
	S/N: 30 dB)
Signal-to-noise ratio	72 dB (IEC-A network)

#### **AM** tuner

Frequency range	531 kHz to 1602 kHz (9 kHz)
	530 kHz to 1 640 kHz (10
	kHz)
Usable sensitivity	25 μV (S/N: 20 dB)
Signal-to-noise ratio	62 dB (IEC-A network)

#### Infrared remote control

Wavelength	940 nm ±50 nm
Outputt	yp; 12 mw/sr per Infrared
L	_ED



Specifications and the design are subject to modifications without notice due to improvements.